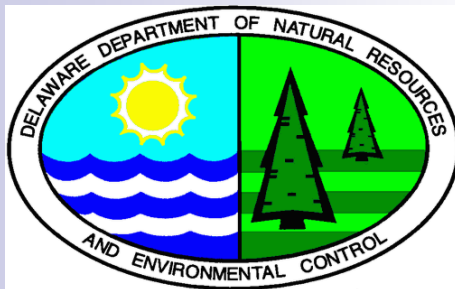




7 DE Admin Code 1138 Section 14

New Miscellaneous Parts or Products Surface Coating Standard



Public Workshops
Sept. 22, 24, and 29, 2009

Blue Skies Delaware; Clean Air for Life

A New Breed of Federal Air Toxics Regulations

112(k) of the CAA



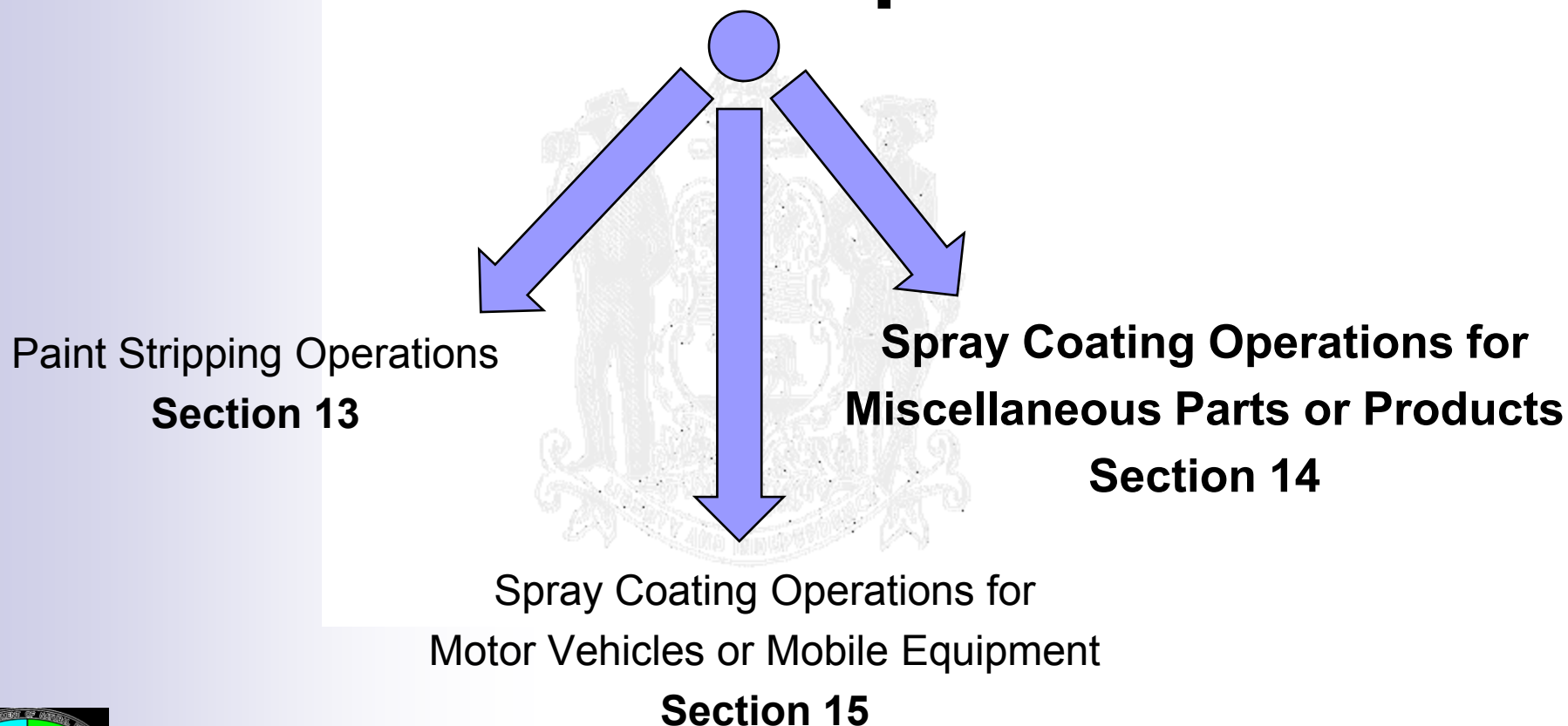
Reducing Potential Adverse Health Impacts from Small Facilities

- Under Section 112(k) of the CAA, Congress mandated EPA to reduce cancer attributed to small area sources by at least 75%
- Congress required EPA to
 - Identify 30+ **HAPs** that present the greatest threat to public health
 - Identify source categories that emit 90% of these 30+ **HAPs**
 - Issue regulations to achieve the 75% reduction in cancer



National Air Toxics Standard Finalized on January 9, 2008

40 CFR Part 63 Subpart HHHHHH



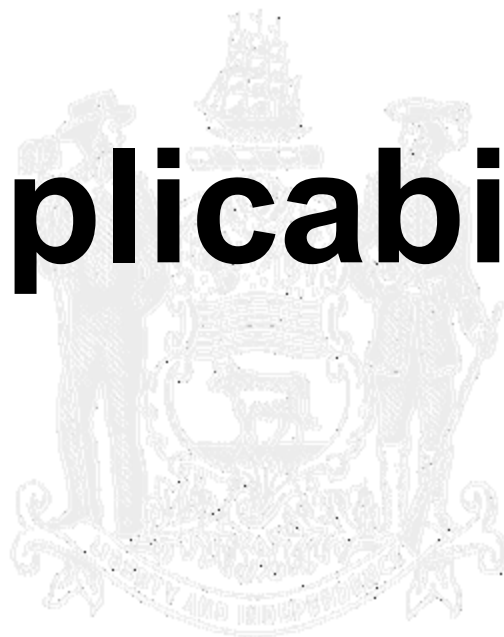
How is Section 14 different from other Delaware surface coating regulations?

- Focusing on the Key Differences from Reg. 1124
 - Applicability
 - Emissions reduction strategy
 - Painting equipment requirements



Who is subject to Section 14?

Applicability



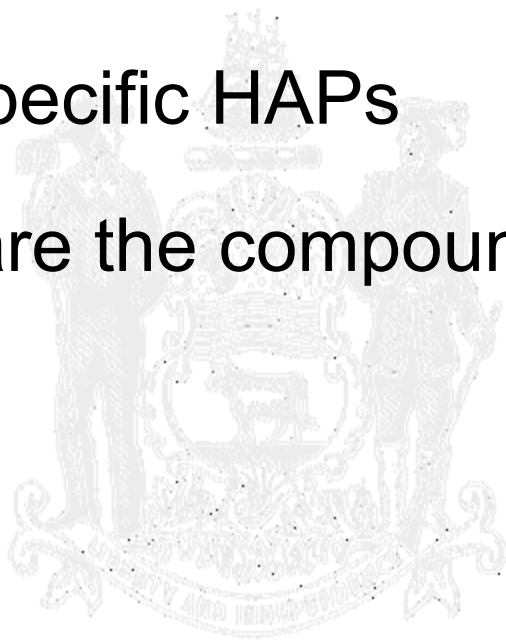
Applicability Difference - 1

- Applicable to many more product categories
 - Covers sources that apply surface coatings to all parts and products that are not
 - Motor vehicles
 - Mobile equipment
 - But limited to metal and/or plastic substrates



Applicability Difference - 2

- Focused only on the non-volatile component in the coating being applied (**coating solids**)
- Focused on 5 specific HAPs
- “Target HAPs” are the compounds of
 - Cadmium
 - Chromium
 - Lead
 - Manganese
 - Nickel



Applicability Difference - 3

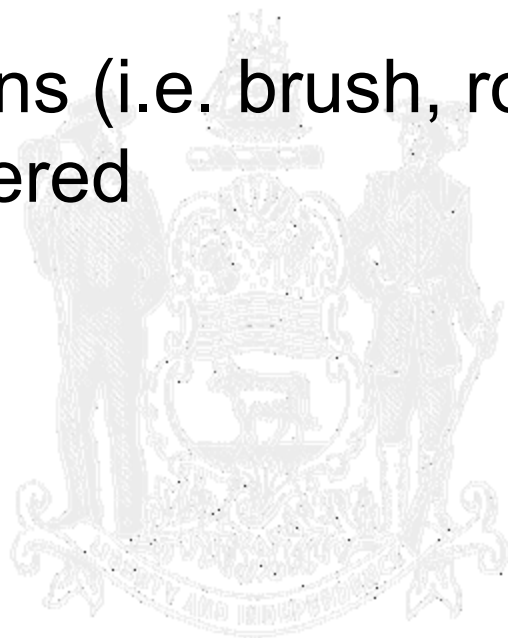
- There is **NO** low threshold for exemption
- Section 14 is applicable to “area HAP sources”

An **area source** of HAPs is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in aggregate, **less than 10 tons per year** of any HAP **or less than 25 tons per year** of any combination of HAPs.



Applicability Difference - 4

- Section 14 is only applicable to surface coating operations that use spray application
- Other applications (i.e. brush, roller, dip, flow, etc) are not covered



So Who is Subject to Section 14?

Each area source facility that performs spray application of coatings that contain target HAPs to any part or product made of plastic, metal, or combination of plastic and metal that are not motor vehicles or mobile equipment



Are there any exemptions from Section 14?

- Coating operations at installations owned or operated by the US Armed Forces
- Coating operations associated with military munitions manufactured by or for the US Armed Forces
- Coating operations associated with space vehicles
- Coating operations associated with facilities maintenance
- Coating operations conducted for **QC or R&D** purposes
- Coating operations already subject to an area source surface coating standard in 40 CFR Part 63 (excluding Subpart 6Hs)
- Coating operations conducted by private citizens for themselves or without compensation



Are there any exemptions from Section 14?

AND FINALLY (Drum roll please)

- Operations that can demonstrate that they spray apply **NO** coatings that contains
 - $\geq 0.1\%$ of any “Target HAP” that is classed as a **OSHA-defined carcinogen** or
 - $\geq 1.0\%$ of any other “Target HAP”



***How do coating operations demonstrate
that their coatings are under the
0.1% and 1.0% “Target HAP” thresholds***

MSDS ?

Supplier's Certifications ?

Manufacturer's Certifications ?



What must be done to be in compliance?

- Emissions Reduction Strategy
 - Requires certified trained painters
 - Requires the capture and control of atomized (coating solids) particulate
 - Provides spray painting equipment requirements



Certified Trained Painters - 1

- **Prohibits** spray application by painters that are NOT certified as having completed the “defined training program”
- Painters must be certified no later than
 - January 10, 2011 or within 180 days following hiring (EXISTING sources)
 - **March 11, 2010** or within 180 days following hiring (NEW sources)



Certified Trained Painters - 2

- **Requires** the development and implementation of the “defined training program”
- The owner or operator is responsible for certifying those painters that successfully completed their training
- Training can be conducted in-house, contracted, or a combination
- Retraining is required every 5 years



Certified Trained Painters - 3

- **Specifies** the minimum acceptable content of the “defined training program”
- Listing of all current painters by name and job description
- Description of the hands-on and classroom instruction components of the training
- Methods to be used to demonstrate the successful completion and certification



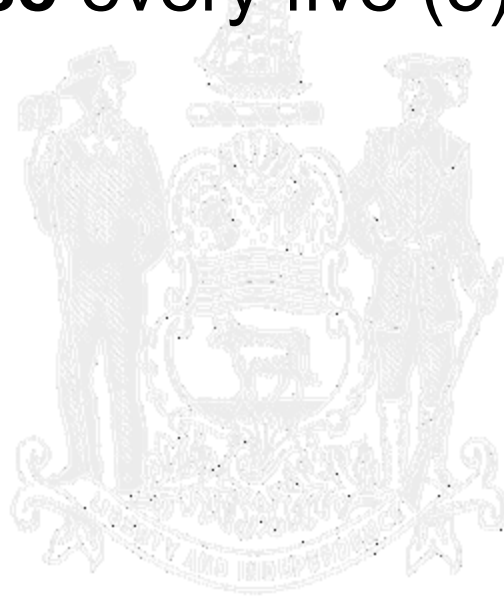
Certified Trained Painters - 4

- **Specifies** the minimum acceptable content of the hands-on and classroom instruction components
 - Spray gun selection, set up and operation
 - Spray technique for different types of coatings to improve transfer efficiency
 - Routine spray booth and filter maintenance
 - Filter selection and installation
 - Environmental compliance requirements



Certified Trained Painters - 5

- **Requires** painters to be **re-certified** as having completed the “defined training program” **refresher course** every five (5) years



Certified Trained Painters

- Is the “defined training program” is a significant change from what you are currently doing?
- How can we help with the environmental compliance requirements portion of the “defined training program”?



What must be done to be in compliance?

- Emissions Reduction Strategy
 - Requires certified trained painters
 - Requires the capture and control of atomized (coating solids) particulate
 - Provides spray painting equipment requirements



Capture and Control of Particulate - Capture

- **Requires** that all spray applications be applied in a spray booth, preparation station or mobile enclosure
- **Requires** spray booths and preparation stations to have a full roof and at least 3 complete walls
- **Requires** spray booths and preparation stations to be ventilated to draw air into the enclosure so the overspray is captured and directed to a filter
- **Requires** mobile ventilated enclosures be sealed against the surface being coated so the overspray is captured and directed to a filter



Capture and Control of Particulate - Control

- **Requires** fitting all enclosures with a filter technology “manufacturer certified” to achieve at least **98%** capture of particulate
- **Requires** the installation and monitoring of the pressure drop across the installed filter technology
- **Limits** spray application to when the pressure drop across the filter is within manufacturer’s recommended operating range



What must be done to be in compliance?

- Emissions Reduction Strategy
 - Requires certified trained painters
 - Requires the capture and control of atomized particulate
 - Provides spray painting equipment requirements



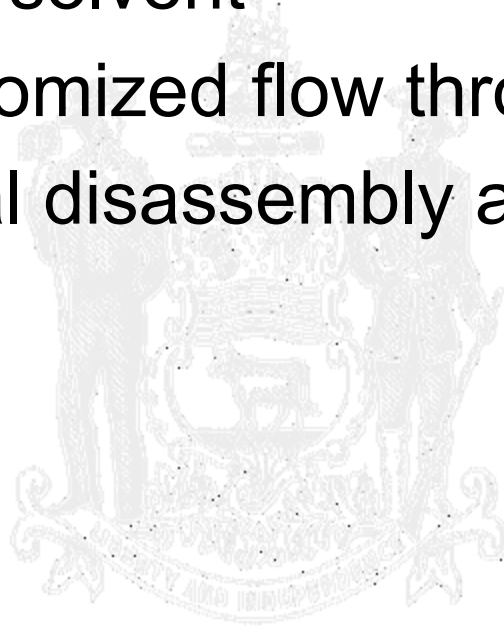
Painting Equipment Requirements

- **Limits** the spray application of coating to
 - **HVLP** spray guns
 - **Electrostatic** application
 - **Airless** spray guns
 - **Air-assisted airless** guns
 - **EPA approved alternative** equivalent to HVLP



Painting Equipment Requirements

- **Prohibits** spray gun cleaning in which an atomized mist or spray is outside the container that collects the solvent
 - Allows non-atomized flow through cleaning
 - Allows manual disassembly and hand cleaning



Are there other compliance requirements?

For existing sources

- **Submittal** of “Initial Notification” no later than **March 11, 2010**
- **Submittal** of “Notification of Compliance Status” no later than March 11, 2011
- **Submittal** of “Annual Notification of Changes” report prior to March 1 following each calendar year, if a deviation or change occurred
- **Keep** all records associated determination of pressure drop monitoring across the filtration system



Are there other compliance requirements?

For new sources

- **Submittal** of “Initial Notification” no later than 180 day following initial start up or Mar. 11, 2010, whichever is later
- **Submittal** of “Notification of Compliance Status” no later than 180 day following initial start up or Mar. 11, 2010, whichever is later
- **Submittal** of “Annual Notification of Changes” report prior to March 1 following each calendar year, if a deviation or change occurred
- **Keep** all records associated determination of pressure drop monitoring across the filtration system



Where are the Notifications/Reports Sent?

Delaware DNREC

Administrator, Air Quality Management

156 S. State Street

Dover, DE 19901

With a copy to

U. S. Environmental Protection Agency

Director, Air Protection Division

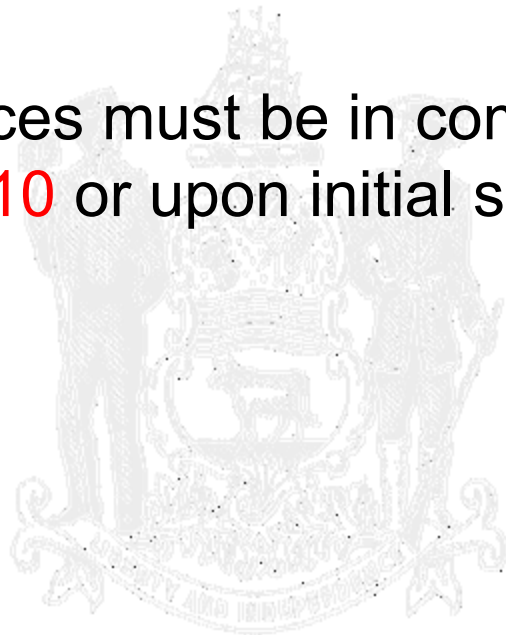
1650 Arch Street

Philadelphia, PA 19103



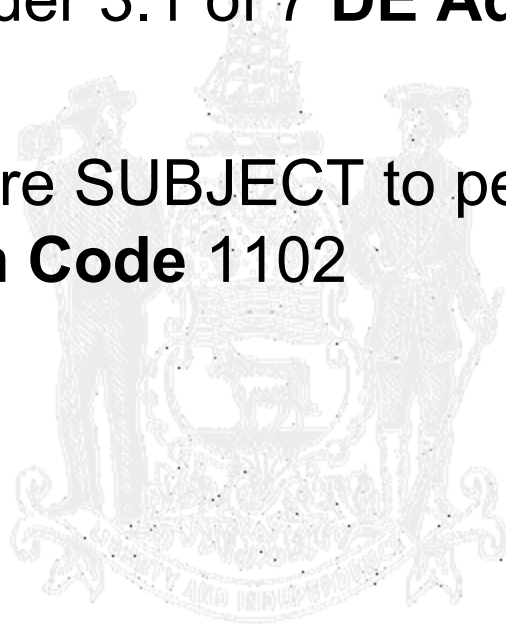
When must a facility be in compliance?

- Existing affected sources must be in compliance no later than January 10, 2011
- New affected sources must be in compliance not later than **March 11, 2010** or upon initial startup, whichever is later



What are the permitting requirements?

- Affected sources are exempt from Title V permitting requirements, **IF** the O/O is not otherwise required to obtain a Title V permit under 3.1 of 7 **DE Admin Code 1130**
- Affected sources are SUBJECT to permitting requirements under 7 **DE Admin Code 1102**



Why is this standard being adopted?

Target hazardous air pollutants (HAPs)

- Compounds of cadmium (Cd)
- Compounds of chromium (Cr)
- Compounds of lead (Pb)
- Compounds of manganese (Mn)
- Compounds of nickel (Ni)



Why is this standard being adopted?

Carcinogenic Effects

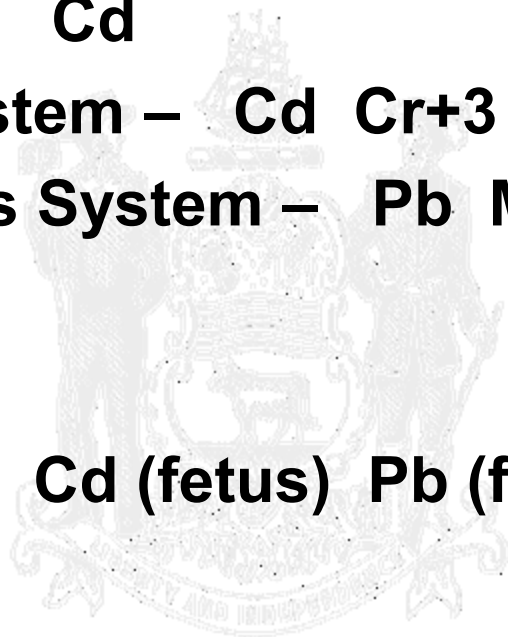
- EPA classified known carcinogen (Group A)
 - Cr+6 compounds
- EPA classified probable carcinogen (Group B1/B2)
 - Cadmium and its compounds
 - Cr+3 compounds
 - Lead compounds
 - Nickel and its compounds



Why is this standard being adopted?

Chronic Non-carcinogenic Effects

- Renal System – Cd
- Respiratory System – Cd Cr+3 Mn Ni
- Central Nervous System – Pb Mn
- Blood – Pb
- Skin – Ni
- Development – Cd (fetus) Pb (fetus & children)



Why is this standard being adopted?

Detailed Health Effects Information

- <http://www.epa.gov/ttn/atw/hlthef/cadmium.html>
- <http://www.epa.gov/ttn/atw/hlthef/chromium.html>
- <http://www.epa.gov/ttn/atw/hlthef/lead.html>
- <http://www.epa.gov/ttn/atw/hlthef/manganes.html>
- <http://www.epa.gov/ttn/atw/hlthef/nickel.html>



Compliance Assistance Tools Available

- Initial notification
- Notification of compliance status
- Annual notification of changes report

<http://www.awm.delaware.gov/Info/Regs/Pages/Section14.aspx>



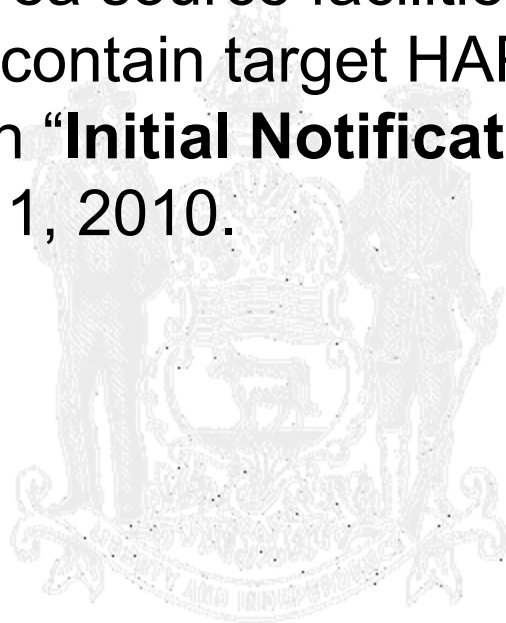
Projected Path Forward

- Publish proposed rule in Delaware Register of Regulation – December 1, 2009
- Public hearing – Dover – January 2010
- Publish final rule in Delaware Register of Regulation – March 1, 2010
- Rule effective date – March 11, 2010



WARNING – WARNING - WARNING

The national air toxics standard on which Section 14 is heavily based (40 CFR Part 63 Subpart HHHHHH) requires **existing** area source facilities that apply spray coatings that contain target HAPs to parts or product to submit an “**Initial Notification**” to EPA no later than January 11, 2010.



For More Information

- www.awm.delaware.gov/Info/Regs/Pages/Section14.aspx
- Contact Jim Snead
 - (302) 323-4542
 - james.snead@state.de.us

